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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,533	09/12/2003	John P. Panunto	6480-03	5337
23477	7590	06/15/2006	EXAMINER	
MARKS & CLERK 1075 NORTH SERVICE ROAD WEST SUITE 203 OAKVILLE, ON L6M 2G2 CANADA			MORRISON, THOMAS A	
			ART UNIT	PAPER NUMBER
			3653	
DATE MAILED: 06/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/660,533	<b>Applicant(s)</b> PANUNTO ET AL.	
	<b>Examiner</b> Thomas A. Morrison	<b>Art Unit</b> 3653	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-6,8-10,12 and 13 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-6,8-10,12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 2-6, 8-10 and 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "said discharge chute" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 13, it is unclear if the recited "said nip" in line 24 of claim 13 refers back to the previously recited "a nip" in line 20 of claim 13 or the previously recited "a nip" in line 10 of claim 13.

Independent claim 13 recites the limitation "the single flat media elements" in line 25. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-3, 5-6, 8, 10 and 13, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,978,114 (Holbrook) in view

of U.S. Patent No. 5,641,155 (Bridges), and further in view of U.S. Patent No. 6,550,764 (Wilson et al.).

Regarding independent claim 13, Figs. 1-4 of Holbrook show a dispenser for dispensing flat media seriatim to a discharge end, including

a media storage bin (including 2) for storing a stack of flat media elements (3), the bin having a bottom end;

a driven rear conveyor (including 10) extending under the bottom end of the media storage bin (including 2) for carrying away flat media elements (3) from the bottom of the stack in a shingled relationship wherein the flat media elements (3) lie flat on the conveyor (including 10) with the leading edge of one said media element (3) overlying the trailing edge of a preceding said media element (3), the driven rear conveyor (including 10) being driven intermittently at a first linear velocity  $V_R$ ;

a coarse media separator (near 145) defining a nip with the rear conveyor (including 10); said nip cooperation with the rear conveyor (including 10) to feed the media elements (3) off the bottom of the stack onto the rear conveyor (including 10) in the shingled relationship;

a driven front conveyor (including 80) downstream of the rear conveyor (including 10) for receiving the flat media elements (3) from the rear conveyor (including 10), the driven front conveyor (including 80) being driven intermittently at a second linear velocity  $V_F$ ;

a single media separator (including 169) comprising a second nip roller (169) cooperating with the driven front conveyor (including 80) to define a nip to separate the shingled media elements (3) received from the rear conveyor (including 10) into single media elements;

a transport conveyor (including 9) for carrying the single flat media elements (3) from the front conveyor (including 80) to the discharge end, the transport conveyor (including 9) being driven intermittently at a third linear velocity  $V_T$ ; and

a plurality of sensors (198). However, the Holbrook patent fails to disclose that the coarse media separator (near 145) has a first nip roller. Also, the Holbrook patent does not specifically disclose first and second height adjustment mechanisms, as claimed. In addition, Holbrook discloses sensors (198), but does not specifically disclose that such sensors operate as claimed.

The Bridges patent discloses that it is well known to provide a dispenser with media separator having a nip roller (17); and a height adjustment mechanism (including 44) that allows the nip roller (17) to be adjusted such that a single flat element (72a in Fig. 4a) or a shingled array of elements (72a-72d in Fig. 5) can be fed. Column 4, lines 54-58 explain that such an adjustable nip roller arrangement allows adjustments to be made so that a desired height of a stack, which is to be conveyed, can be attained. This section also explains that such an arrangement allows adjustments to be made responsive to the coefficient of friction of the material in the stack. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide

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the Holbrook device with a coarse media separator having a nip roller; and a first height adjustment mechanism, in order to allow adjustments to be made so that a desired height of a stack, which is to be conveyed, can be attained, as taught by Bridges.

Moreover, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the single media separator of Holbrook with a single media separator that can be adjusted via a second height adjustment device, in order to allow adjustments to be made responsive to the coefficient of friction of the material in the stack, as taught by Bridges.

The Wilson et al. patent discloses that it is well known to provide a dispenser with a first sensor (241) responsive to the presence or absence of a media element at a discharge end to stop operation of a transport conveyor (50); a second sensor (231) responsive to the presence or absence of a media element on the transport conveyor (50) to stop operation of a front conveyor (31); and a third sensor (221) responsive to the presence or absence of a media element at an input to the front conveyor (31) to stop operation of a rear conveyor (17). More specifically, Fig. 3 of the Wilson patent shows a combination of sensors 201-241 and a microprocessor controller. Column 7, lines 37-47 explain that such an arrangement provides a comprehensive and coherent control system to better enforce gap size and to increase document throughput. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Holbrook device with sensors and to operate the controller (16) of Holbrook in a manner as taught by Wilson et al., in order to better enforce gap size and to increase document throughput, as taught by Wilson et al. Providing sensors on the

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Holbrook device in a manner as taught by Wilson, will result in a first, second and third sensor arrangement, as claimed.

Regarding claim 2, column 13, lines 26-30 of Wilson et al. explain that it is well known to operate a rear conveyer 17 at  $V_R = 37.4\text{ips}$ . Also, column 5, lines 52-55 and column 13, lines 60-62 of Wilson et al. explain that it is well known to operate a belt 42 that drives media at a speed ( $V_F = 42\text{ ips}$ ) through a front conveyer (31). As such,  $V_F > V_R$ . Also, Figs. 9f-9g of Wilson et al. show a situation where  $V_T > V_F$ . Element (50) is a transport conveyer in Wilson et al. In addition, Wilson et al. provides a general teaching in column 10, lines 19-23 that it is advantageous to increase the speed of the conveying devices, so that there is a tension applied to the sheets to pull the sheets downstream. It would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the rear conveyer, the front conveyer and the transport conveyer of Holbrook at  $V_F > V_R$  and  $V_T > V_F$ , to apply sufficient tension to the sheets to pull them downstream, as taught by Wilson et al.

Regarding claim 3, Fig. 1 of Holbrook shows that the media storage bin (2) is arranged vertically.

Regarding claim 5, Fig. 1 of Holbrook shows that the transport conveyer (9) has upper and lower conveyers that are spaced apart to secure single media elements, but does not show that the transport conveyer has belts. Holbrook as modified by Bridges and Wilson et al. meets the limitations of the claim except that it employs a upper and lower rollers rather than a plurality of upper and lower belts in order to transport sheets.



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However, these two elements were art recognized equivalents at the time of the invention in those sheet transport applications where it is immaterial whether the plurality of belts or the rollers are used for transporting sheets. Therefore, one of ordinary skill would have found it obvious to substitute a plurality of belts for the rollers of Holbrook to facilitate sheet transport as suggested by Fig. 4 of Holbrook.

Regarding claim 6, the combination of Holbrook, Bridges and Wilson et al. discloses the claimed invention, except for the different types of media conveyed by the apparatus. It would have been obvious to one having ordinary skill in the art at the time the invention was made to convey any suitable media on the Holbrook apparatus, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice. In re Leshin, 125 USPQ 416.

Regarding claim 8, Figs. 8h and 8j of Wilson et al. show that the first sensor (241) operates to stop operation of the transport conveyor (50) when it senses the presence of media thereat. Thus, providing the sensors in this manner in the Holbrook device will have the same result.

Regarding claim 10, Holbrook provides a broad teaching that the motors (11 and 14 that operate the front and transport conveyors (including 80 and 9, respectively) can be operated in any suitable manner. See, e.g., column 2, lines 32-38. It would have been an obvious to one of ordinary skill in the art at the time the invention was made to start the operation of the transport conveyer (9) whenever the front conveyer (including



80) starts its operation, so that the transport conveyer (9) is ready to receive sheets from the front conveyer (including 80) when ever the front conveyer is running.

3. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook in view of Bridges, and further in view of Wilson et al. as applied to claim 2 above, and further in view of U.S. Patent No. 4,928,944 (Goliez).

Regarding claims 4 and 12, Fig. 3 of Holbrook shows that the front conveyor comprises at least two parallel conveyor belts (80), but does not show that the rear conveyer (including 10) has two belts.

The Goliez patent shows that it is well known in the art to provide a dispenser with a plurality of belts (34) in a conveyer for rapidly feeding sheets from a stack. See, e.g., column 4, line 60 of the Goliez patent. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the dispenser of Holbrook with a plurality of belts instead of rollers (10), because such a modification merely replaces one well-known sheet feeding device with another well-known sheet feeding device that performs the same function.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holbrook in view of Bridges, and further in view of Wilson et al. as applied to claim 8 above, and further in view of U.S. Patent No. 5,358,229 (Groel et al.).

Regarding claim 9, the combination of Holbrook, Bridges and Wilson et al. discloses all of the limitations of claim 9, except for a box ready sensor, as claimed. The Groel et al. patent discloses that it is well known to provide a dispenser with a box

ready sensor (13) to sense when a receiver (near 11) for media being discharged is capable of receiving more media, and which operates to start operation of a transport conveyor (Fig. 1) when the receiver is capable of receiving more media. Groel et al. explains that such an arrangement requires less expense for supervision. See, e.g., column 1, lines 23-27. It would have been an obvious to one of ordinary skill in the art at the time the invention was made to provide the Holbrook apparatus with a box ready sensor at a receiver in order to control the dispensing of sheets with less supervision, as taught by Groel et al.

### ***Response to Arguments***

5. Applicant's arguments with respect to claim 13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

06/10/2006

  
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SUPERVISORY PATENT EXAMINER